## CLAIMS A moisture detection device characterized 2 by comprising: 3 a mirror whose mirror surface is exposed to a gas to be measured; 4 5 minute projections formed on the mirror 6 surface of said mirror; 7 cooling means for cooling said mirror; 8 light-emitting means for applying light to the 9 mirror surface: 10 light-receiving means for receiving reflected 11 light of light applied from said light-emitting means to 12 the mirror surface; and 13 means for detecting moisture which is produced 14 on the mirror surface of said mirror which is cooled by 15 said cooling means on the basis of the reflected light 16 received by said light-receiving means. A moisture detection device according to 2 claim 1, characterized in that the projection comprises 3 a projection with a pointed tip. A moisture detection device according to 2 claim 1, characterized in that the projection comprises 3 a columnar projection. A moisture detection device according to 4. 2 claim 1, characterized in that the projection comprises 3 a semispherical projection. 5. A moisture detection device according to - 26 -

- 2 claim 1, characterized in that the projection is formed
- 3 by using a photoresist and etching.
  - 6. A moisture detection device according to
- 2 claim 1, characterized in that the projection is
- 3 structured such that glass powder is bonded to the
- 4 mirror surface.
  - 7. A moisture detection device according to
- 2 claim 1, characterized in that the projection is
- 3 structured such that diamond powder is bonded to the
- 4 mirror surface.